

**Remarks/Arguments:**

Claims 1, 3-6, 8, 10-16, and 18 are presently pending. Claims 2, 7, and 9 have been cancelled. Claims 1, 3, 4, 6, 8, 10-16, and 18 have been amended. Claim 19 has been added. Support for claim 19 may be found in the originally filed application at paragraph [0128]. No new matter is added. Reconsideration is respectfully requested in view of the above amendments and the following remarks.

Applicants acknowledge with appreciation the indication that claim 4 would be allowable if rewritten in independent form. In view of the amendments and remarks below, Applicants respectfully submit that it is not necessary to rewrite claim 4.

**Claim Rejections Under 35 U.S.C. § 103**

Page 2 of the Office Action sets forth "Claims 1 and 6-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noji et al (6,543,900 B2) in view of Nakanishi (2004/006668)." Page 9 of the Office Action sets forth "Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noji...in view of Nakanishi...and further in view of Bierhuizen (US 7,055,967)." Applicants respectfully submit that these rejections are overcome by the amendments to the claims for the reasons set forth below.

Applicants' invention, as recited by claim 1, includes features which are not disclosed, taught, or suggested by the cited art, namely:

...a first light generating instrument which includes a light source that generates white light...

...a second light generating instrument which includes a plurality of solid state light sources which generate red, green, and blue monochromatic light respectively...

...a color wheel...

...a light guiding instrument which switches between guiding the white light and the monochromatic light to the color wheel....

This means that a first light generating instrument generates white light and a second light generating instrument generates monochromatic light. A light guiding instrument switches between guiding the white light and the monochromatic light to a color wheel. This

feature is found in the originally filed application at paragraphs [0115] and [0119]-[0122], and FIGS. 7 and 8. No new matter is added.

Noji is directed to a projection apparatus. As illustrated in FIG. 1, Noji discloses a projector system having a metal halide lamp 1a and a halogen lamp 2a. Noji discloses a movable mirror 3 for reflecting light from lamps 1a and 2a, and a shutter 4 for intercepting light from lamps 1a and 2a. Noji discloses that movable mirror 3 and shutter 4 are connected with a timing belt 19a. When the projector system is turned on, the movable mirror 3 reflects light from lamp 2a onto lens 5, while shutter 4 intercepts light from lamp 1a. When the light amount from lamp 1a is sufficient, mirror 3 and shutter 4 are moved so that mirror 3 reflects light from lamp 1a onto lens 5, while shutter 4 intercepts light from lamp 2a. See Noji at column 5, line 55, to column 6, line 31; column 7, lines 6-48; and column 8, line 54 to column 9, line 24.

Nakanishi is directed to a video display device. As illustrated in FIG. 1, Nakanishi discloses a video display device having a red color light source 1, a green color light source 2, and a blue color light source 3. Light sources 1, 2, and 3 may be LEDs. See Nakanishi at paragraphs [0115]-[0117].

Bierhuizen is directed to illumination systems. As illustrated in FIG. 1, Bierhuizen discloses a light source 100 including an arc lamp 101. Light from lamp 101 passes through segments of a color wheel 103. The light then enters the optical components of an image projection system 105. See Bierhuizen at column 2, lines 29-48.

The Office Action acknowledges that neither Noji nor Nakanishi disclose a color wheel. Thus, neither Noji nor Nakanishi disclose the feature of "a light guiding instrument which switches between guiding the white light and the monochromatic light to the color wheel," as recited in claim 1.

Applicants note that Bierhuizen discloses only a single arc lamp 101. Arc lamp 101 is directed toward a color wheel 103 using an elliptical reflector 102. Bierhuizen fails to disclose a second light source that provides light to color wheel 103. Further, Bierhuizen fails to disclose that elliptical reflector 102 is operable to switch from guiding light from arc lamp 101 to color wheel 103. This is different from the claimed invention because claim 1 requires a light guiding instrument that switches between guiding a white light and guiding a monochromatic light to a color wheel.

Accordingly, Applicants respectfully submit that Noji in view of Nakanishi and Bierhuizen fails to disclose, teach, or suggest the feature of "a light guiding instrument which switches between guiding the white light and the monochromatic light to the color wheel," as recited in claim 1.

It is because Applicants' claimed invention includes the feature of a light guiding instrument which switches between guiding white light and guiding monochromatic light to a color wheel that the following advantages are achieved. Using the above configuration, a color image may be projected "even if the reflective indicating element 201 is [only] one optical system." See the application at paragraphs [0117]-[0119].

Accordingly, for the reasons set forth above, claim 1 is allowable over the cited prior art. Therefore, withdrawal of the rejection and allowance of claim 1 is respectfully requested.

Claim 16, while not identical to claim 1, includes features similar to the allowable features discussed above with respect to claim 1. Accordingly, claim 16 is also allowable over the cited prior art for at least the reasons set forth above with respect to claim 1. Therefore, withdrawal of the rejection and allowance of claim 16 is respectfully requested.

Claims 3, 4, 6, 8, 10-15, and 18 include all of the features of one of claims 1 and 16, from which they depend. Thus, claims 3, 4, 6, 8, 10-15, and 18 are also allowable over the cited prior art for at least the reasons set forth above with respect to claims 1 and 16. Therefore, withdrawal of the rejection and allowance of claims 3, 4, 6, 8, 10-15, and 18 is respectfully requested.

Claim 10 includes additional features not disclosed, taught, or suggested by the cited art, namely: "the optical axis of the white light generated by the first light generating instrument between the first light generating instrument and a collector optics is substantially on a straight line." Noji discloses that the light from both lamps 1a and 2a is reflected by movable mirror 3 in order to contact lens 5. Thus, Noji fails to disclose the optical axis of the light between lamp 1a and lens 5 is substantially on a straight line. Therefore, withdrawal of the rejection and allowance of claim 10 is respectfully requested for at least this additional reason.

Claim 11 includes additional features not disclosed, taught, or suggested by the cited art, namely: "the optical axis of the monochromatic light generated by the second light

generating instrument between the second light generating instrument and a collector optics is substantially on a straight line." Noji discloses that the light from both lamps 1a and 2a is reflected by movable mirror 3 in order to contact lens 5. Thus, Noji fails to disclose the optical axis of the light between lamp 2a and lens 5 is substantially on a straight line. Therefore, withdrawal of the rejection and allowance of claim 11 is respectfully requested for at least this additional reason.

Claim 12 includes additional features not disclosed, taught, or suggested by the cited art, namely:

the first light generating instrument is driven by a first power supply based on supply of power from outside,

the second generating instrument is driven by a second power supply which is a built-in power supply,

the control instrument monitors a status of the first power supply and the second power supply, and

the control instrument, (i) on detecting that the first power supply is supplied with the power from outside, controls the light guiding instrument to guide the monochromatic light to the color wheel, and then controls the light guiding instrument to guide the white light to the color wheel, and (ii) on detecting that the first power supply is not supplied with the power from outside, controls the light guiding instrument to guide the monochromatic light to the color wheel.

Noji discloses that both lamps 1a and 2a receive power from power source circuit 107. Noji fails to disclose or suggest that lamp 1a is driven by a first power supply based on supply of power from outside, and that lamp 2a is driven by a second power supply which is a built-in power supply. Therefore, withdrawal of the rejection and allowance of claim 12 is respectfully requested for at least this additional reason.

**New Claim**

Claim 19 includes all of the features of claim 1, from which it depends. Thus, claim 19 is also allowable over the cited prior art for at least the reasons set forth above with respect to claim 1. Applicants respectfully submit that claim 19 includes additional features which are not disclosed, taught, or suggested by the cited prior art, namely: "the color wheel further includes a region corresponding to white, and the second light generating instrument lights up, when the

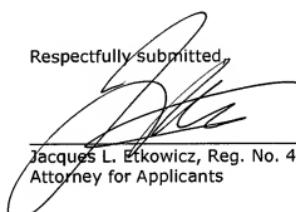
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Reply to Office Action of November 30, 2009

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region corresponding to white is located in the light path, all the solid state light sources." Applicants respectfully submit that the cited art fails to disclose, teach, or suggest at least this feature. Accordingly, claim 19 is allowable over the cited prior art for at least this additional reason.

In view of the foregoing amendments and remarks, Applicants submit that this application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

  
Jacques L. Etkowicz, Reg. No. 41,738  
Attorney for Applicants

JLE/dmw

Dated: February 24, 2010

P.O. Box 980  
Valley Forge, PA 19482  
(610) 407-0700

637169